

*A* 1  
*cancel*  
culturing, thereby forming arachidonic acid or lipid containing arachidonic acid and recovering arachidonic acid.

*A* 2  
3. (Amended) The process according to claim 1 [or 2], wherein the microorganism belonging to the genus [Mortierella] Mortierella is a microorganism belonging to subgenus [Mortierella] Mortierella.

*A* 2  
4. (Amended) The process according to claim 3, wherein the microorganism belonging to subgenus [Mortierella] Mortierella is a microorganism belonging to the species [alliacea] alliacea.

*A* 3  
7. (Amended) The process for producing arachidonic acid or lipid containing arachidonic acid according to [any one of claims 1 to 6] claim 1, wherein the carbon source concentration at the start of culturing is at least 8% by weight.

*A* 3  
8. (Amended) A process for producing dihomo- $\gamma$ -linolenic acid or lipid containing dihomo- $\gamma$ -linolenic acid comprising the steps of culturing a microorganism belonging to the genus [Mortierella] Mortierella and having a resistance to a carbon source of high concentration in a medium having a carbon source concentration of at least 4% by weight at the start of culturing and containing a  $\Delta 5$  denatures inhibitor, thereby forming a dihomo- $\gamma$ -linolenic acid or lipid containing dihomo- $\gamma$ -linolenic acid, and recovering dihomo- $\gamma$ -linolenic acid.

10. (Amended) The process according to claim 8 [or 9], wherein the microorganism belonging to the genus [Mortierella] Mortierella is a microorganism  
*Ay* belonging to subgenus [Mortierella] Mortierella.

14. (Amended) The process for producing arachidonic acid or lipid containing dihomo- $\gamma$ -linolenic acid according to [any one of claims 8 to 13] claim 8, wherein the carbon source concentration at the start of culturing is at least 8% by weight.

*AS* 15. (Amended) A process for producing eicosapentaenoic acid or lipid containing eicosapentaenoic acid comprising the steps of culturing at temperatures of up to 20°C a microorganism belonging to the genus [Mortierella] Mortierella and having resistance to a carbon source of high concentration in a medium having a carbon source concentration of at least 4% by weight at the start of culturing, thereby forming eicosapentaenoic acid or lipid containing eicosapentaenoic acid and covering eicosapentaenoic acid.

*AB* 17. (Amended) The process according to claim 15 [or 16], wherein the microorganism belonging to the genus [Mortierella] Mortierella is a microorganism belonging to subgenus [Mortierella] Mortierella.